IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of inventor(s):

YADEGAR et al.

Serial Number:

10/656,067

10/030,007

Examiner:

Not assigned yet

Filed:

September 5, 2003

Art Unit:

Not assigned yet

Confirmation No.:

Not assigned yet

For: A METHOD FOR CONTENT DRIVEN IMAGE COMPRESSION

MAIL STOP NON FEE AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, disclosure is made of the following known related art listed in the accompanying Information Disclosure Citation, Form PTO-1449. According to the announcement made via the USPTO web site entitled "Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003," no copies of the U.S. patent references are enclosed.

Applicants hereby cite the patents and/or publications on the attached form for consideration by the Patent and Trademark Office in regard to the claimed invention. By this notice, Applicants request that the Patent and Trademark Office make of record the documents listed. No representation is made that more pertinent material is not available or should not be considered by the Examiner. It is expected that the Patent and Trademark Office will

PATENT 03-12478

independently conduct a complete search of appropriate prior art. Furthermore, no admission

is being made that these documents are prior art, and Applicants reserve the right to challenge

any such conclusion.

Reference AC (page 1) for "Information, Uncertainty and The Utility of Categories,"

M. Gluck and J. Corter, in Proc. Annual Conference of the Cognitive Science Society, Irvine,

CA., was unavailable and its listing in the Information Disclosure Citation is Applicants'

attempt to conform to their duty of good faith. The same is similarly true for reference AE

(page 1) for "Models of Incremental Concept Formation," J. H. Gennari, P. Langley, and D.

Fisher, Artificial Intelligence, 40: 11-61, 1990. The same is similarly true for reference AH

(page 3) for Frost & Sullivan, US 3D Imaging Markets, January 22, 2003.

Should there be any remaining or further questions, the Examiner is requested to please

contact the undersigned directly. It is not believed that any additional fees are due. However,

in the event additional fees are due, the Examiner is hereby authorized to charge Applicant's

Attorney's Deposit Account No. 03-2030.

Respectfully submitted,

CISLO & THOMAS LLP

Date: December \, 2003

Daniel M. Cislo

Reg. No. 32,973

Tel.: (310) 451-0647 x128

DMC/ASJ/mfn CISLO & THOMAS LLP 233 Wilshire Boulevard, Suite 900 Santa Monica, California 90401

Tel: (310) 451-0647 Fax: (310) 394-4477

Customer No.: 25,189



Postal Service as first class mail in an envelope addressed to:

MAIL STOP NON-FEE AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on:

Labor S. Jen

Andrew 5. Jordan, Reg. 140. 95,517

t:\03-12478\followup ids publications 12478 yadegar data compression.doc December 3, 2003

Form PTO-144		9 U.S. Department of Commerce	Atty. Docket No.	Serial No.			
(Rev. 8-83)		Patent and Trademark Office	03-12478	10/656,067			
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)			Applicant YADEGAR et al.	1			
			Filing Date	Group			
			09/05/2003				
982		OTHER DOCUMENTS (Inc	cluding Author, Title, Da	te, Pertinent Pages, etc.)			
PADEN	NAME OF	Project Brief, http://jazz.nist.gov/atp					
MADE	AB	Robot Learning, Boston: Kluwer Ac	cial neural networks for autonomous robot driving," D. A. Pomerleau, cademic Publishers, J. Connel and S. Mahadevan (Eds.), 1993				
	AC	"Information, Uncertainty and The Conference of the Cognitive Science	Utility of Categories," M. Gluck and J. Corter, in Proc. Annual e Society, Irvine, CA.				
	AD	"Knowledge Acquisition Via Incremental Conceptual Clustering," D. Fisher, Machine Learning, 2 (2), 1					
	AE						
	AF	"Vector Quantization," R.M. Gray, IEEE ASSP Magazine, Vol. 1, pp. 4-29, April 1984.					
"Image classification by a two dimensional Hidden Markov Model," J. Li, A. Najami, Rober Transactions on Signal Processing, February 2000.							
	АН	"Multiresolution image classification by hierarchical modeling with two dimensional hidden Markov models, J. Li, R.M. Gray, and R.A. Olshen, IEEE Transactions on Information Theory, Vol. 46, pp. 1826-1841, August 2000.					
	AI	"Maximum likelihood from incomplete data via the EM algorithm," A. Dempster, N. Laird, and D. Ru Journal of the Royal Statistical Society, Series B, 39 (1):1-38, 1977					
	AJ	"Robust image classification based on a non-causal hidden Markov Gauss mixture model," K. Pyun, C.					
	AK	"Image categorization based on segmentation and region clustering," J. Brank, Proceedings of the 1st Start AI Researchers Symposium (STAIRS), vol. 78, pp. 145-154, Lyon, France, July 22-23, 2002.					
-	AL	"IRM: Integrated region matching for image retrieval," Li, J. Z. Wang, G. Wiederhold, Proc. 8th ACM, Multimedia Conference, pp. 147-156, Los Angeles, USA, 2000.					
	AM	"Support-vector networks," C. Cortes, V. Vapnik, Machine Learning, 20(3):273-297, September 1995.					
"Mixture of Probabilistic Principal Component Analysis," M. E. Tipping and C. M. Bishop, N. Computation, 11(2):443-482, 1999.							
"The EM algorithm for mixtures of factor analyzers," Z. Ghahramani and TR-96-1, Univ. of Toronto, 1997.							
"SMEM algorithm for Mixture Models," N. Uedam, R. Nakano, Z. Ghahramani, G. E in Neural Information Processing Systems, volume 11, 1999.							
	AQ	1. Winn. In Proc. 6th European Conference					
on Computer Vision, ECCV, Springer (2000) 1, 3-17, 2000. "New Trends in Image and Video Compression," Torres, L., and Delp, E., X Europea Conference, Tampere, Finland, September 4-8, 2000.							
	+	"A Subspace Approach to Layer Ex	raction, "Ke, Q., and Kanad	le, T., IEEE International Conference on			
	AS	Computer Vision and Pattern Recog	nition (CVPR 2001), Decem	ber, 2001.			

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

^{*} Examiner:

Form PTO-1449 U.S. Department of Commerce	Atty. Docket No.	Serial No.					
(Rev. 8-83) Patent and Trademark Office	03-12478	10/656,067					
INFORMATION DISCLOSURE	Applicant						
CITATION (Use several sheets if necessary)	YADEGAR et al.	YADEGAR et al.					
(Use several sheets if necessary)	Filing Date	Group					
a mma &	09/05/2003						
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
"Tiling and adaptive image complete	"Tiling and adaptive image compression," Lee, W.S., IEEE Transactions on Information Theory, 46(5):1789-						
P. Schröder and W. Sweldens, Di Engineering, pp.41-44, 2001.	P. Schröder and W. Sweldens, Digital Geometry Processing, in Sixth Annual Symposium on Frontiers of						
A Lee W Sweldens P Schröder	I. Cowsar and D. Dobkin, MAI	PS: Multiresolution adaptive					
parameterization of surfaces, Com	A. Lee, W. Sweldens, P. Schröder, L. Cowsar, and D. Dobkin, MAPS: Multiresolution adaptive parameterization of surfaces, Computer Graphics (SIGGRAPH '98 Proceedings), pages 95104, 1998.						
AD G. Taubin and J. Rossignac, George	G. Taubin and J. Rossignac, Geometric compression through topological surgery, ACM Trans.						
R. Pajarola and J. Rossignac, Com Georgia Institute of Technology, 1	R. Pajarola and J. Rossignac, Compressed progressive meshes, Technical Report GIT-GVU-99-05, GVU Center,						
S. Gumhold and W. Strasser, Red	l Time Compression of Triangle	Mesh Connectivity, Proc. ACM Siggraph					
98, pp. 133-140, July 1998.							
	J. Rossignac, Edgebreaker: Connectivity compression for triangle meshes, IEEE Transactions on Visualization and Computer Graphics, Vol. 5, No. 1, January - March 1999.						
A. Khodakovsky, P. Schröder, ar	A. Khodakovsky, P. Schröder, and W. Sweldens: Progressive geometry compression, Proceedings of						
SIGGRAPH, 2000. C. Touma and C. Gotsman, <i>Triangle Mesh Compression</i> , in Proceedings of the 24th Conference or Interface (GI-98), pp. 26—34.							
						P. Schröder and W. Sweldens, Sp.	P. Schröder and W. Sweldens, Spherical Wavelets: Efficiently Representing Functions on a Sphere, Computer
Graphics, Annual Conference Series (SIGGRAPH '95 Proceedings), pp. 161-172, 1995. A. Said and W. A. Pearlman, A new fast and efficient image codec based on set partitioning in hierarchy.							
trees, IEEE. Trans. Circ. Syst. V	ideo Tech. 6, pp. 243250, Jun	e 1996.					
H. Lee, M. Desbrun, and P. Schr '03 / ACM TOG.	H. Lee, M. Desbrun, and P. Schröder: Progressive Encoding of Complex Isosurfaces, in ACM SIGGRAPH						
W. E. Lorensen and H. E. Cline,	W. E. Lorensen and H. E. Cline, Marching cubes: A high resolution 3D surface construction algorithm,						
Computer Graphics (SIGGRAPH	'87 Proceedings), volume 21, p	ages 163169, July 1987.					
T. Gerstner and R. Pajarola, Top.	T. Gerstner and R. Pajarola, Topology Preserving and Controlled Topology Simplifying Multiresolution						
Isosurface Extraction, IEEE Transactions on Visualization and Computer Graphics, 2000. Z. Wood, M. Desbrun, P. Schröder and D.E. Breen: Semi-Regular Mesh Extraction From Volumes, Visualization 2000 Conference Proceedings, pp. 275-282.							
						D.E. Laney, M. Bertram, M.A.	D.E. Laney, M. Bertram, M.A. Duchaineau, and N. Max, Multiresolution distance volumes for progressive surface compression, Proceedings of 3D Data Processing Visualization and Transmission 2002, pp. 470-479.
G. Taubin, BLIC: Bi-Level Isosur	G. Taubin, BLIC: Bi-Level Isosurface Compression, Proceedings of IEEE Visualization 2002, Boston, October 2002.						
October 2002.							
G. M. Treece, R. W. Prager, and	G. M. Treece, R. W. Prager, and A. H. Gee: Regularised marching tetrahedra: improved iso-surface						
AR extraction, Technical Report COI	raction, Technical Report CUED/F-INFENG/TR 333, Cambridge University Engineering Dept.,						
J. M. L. Maubach: Local bisection	J. M. L. Maubach: Local bisection refinement for N-simplicial grids generated by reflection, SIAM J. Sci.						
Comput., 16 (1995), pp. 210-227	Date Conside	ered:					
Examiner:	Date Conside	cicu.					

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

^{*} Examiner:

Form PTO-1449		Atty. Docket No.	Serial No.					
(Rev. 8-83) Patent and Trademark Office		03-12478	10/656,067					
n 44	RMATION DISCLOSURE CITATION	Applicant YADEGAR et al.						
1 7 7	Use several sheets if necessary)							
B A WE E		Filing Date 09/05/2003	Group					
\$ 10 to 10 t								
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)								
AA	G.M. Nielson and B. Hamann: The Asymptotic Decider: Resolving the Ambiguity in Marching Cubes, Proceedings of Visualization '91, IEEE Computer Society Press, pp. 83-90, 1991.							
AB	CyberEdge, The Market for Visual Simulation/Virtual Reality Systems, Oct 2002.							
AC	S.I. Erwin, "Forecast is Rosy for Visual Simulation Industry," National Defense Magazine, Nov 2001.							
AD	Daratech, Press Release, Nov 14, 2002, http://www.daratech.com/pressroom/releases/021106.html							
AE	H. Tabatabie, "Imaging and the Enterprise," Health Management Technology, Nov 2001.							
AF	"C4.5: Programs for Machine Learning," J. R. Quinlan, San Mateo, CA: Morgan Kaufmann, 1993.							
AG	U. Jasnoch, V. Coors, U. Kretschmer, Applications of 3D GIS, 2000, http://www.giscience.org/GIScience2000/posters/125-Jasnoch.pdf							
АН	Frost & Sullivan, US 3D Imaging Markets, Jan 22, 2003.							
AI								
AJ								
AK								
AL								
AM								
AN								
AO								
AP								
AQ								
AR								
AS								
Examiner		Date Conside	red:					

* Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.